THE THEORIES ADVANCED IN EXPLANATION OF ECONOMIC CRISES

By E. M. Patterson, Ph.D.,

Wharton School of Finance and Commerce, University of Pennsylvania.

A definition of an economic "crisis" is, like most other definitions, very difficult to construct. By way of introduction we shall quote a few chosen somewhat at random. Adolph Wagner, the German economist, expresses his idea by saying: "Crises imply . . . . the overwhelming and simultaneous occurrence of inability on the part of independent entrepreneurs to pay their debts." This is similar to the statement of John Stuart Mill: "There is said to be a commercial crisis when a great number of merchants and traders at once either have, or apprehend that they shall have, a difficulty in meeting their engagements." Professor E. D. Jones says: "A crisis is the sudden application of a critical conservatism to business transactions, leading to such a demand for liquidation as to cause a widespread inability among business men to meet their obligations." Senator Theodore E. Burton states: "The word crisis, if employed with entire accuracy, describes a period of acute disturbance in the business world, the prevailing features of which are the breakdown of credit and prices and the destruction of confidence. It has especially to do with the relations of debtor and creditor."

None of these definitions gives so clear an idea as does a brief description. Probably no one has ever pictured the crisis and the associated events more effectively than did Frederick Engels in his little volume *Socialism: Utopian and Scientific*.

As a matter of fact, since 1825, when the first general crisis broke out, the whole industrial and commercial world, production and exchange among all civilized peoples and their more or less barbaric hangers-on, are thrown out of joint about once every ten years. Commerce is at a standstill, the markets are glutted, products accumulate, as multitudinous as they are unsaleable, hard cash disappears, credit vanishes, factories are closed, the mass of the workers are in want of the means of subsistence, because they have produced too much of the means of subsistence; bankruptcy follows upon bankruptcy, execution upon execution. The stagnation lasts for years; productive forces and products are wasted and destroyed wholesale, until the accumulated mass of commodities finally

filter off, more or less depreciated in value, until production and exchange gradually begin to move again. Little by little the pace quickens. It becomes a trot. The industrial trot breaks into a canter, the canter in turn grows into the headlong gallop of a perfect steeplechase of industry, commercial credit, and speculation, which finally, after breakneck leaps, ends where it began—in the ditch of a crisis. And so over and over again.

Perhaps even this vivid word picture will be less impressive to some than a few facts as to the serious effects of the crisis and the depression that follows it. Professor Wesley C. Mitchell in his recent volume entitled *Business Cycles* has recorded the significant features of the crisis of 1907 in England and the United States and the following points have been taken from his account. By the middle of the summer evidences of difficulty had begun to appear in England. British railway stocks had fallen off in price; the shipbuilding yards had few new contracts; costs of production had become so great that many manufacturers were refusing to take new business at the ruling quotations; the building trades were dull; the ratio of net to gross railway receipts declined; commodity prices began to drop; bank clearings fell off; imports gained less rapidly; and the percentage of trade union members unemployed rose from 2.8 per cent at the end of April to 3.6 per cent by the close of August. These difficulties came to a climax in the latter half of the year, being intensified by the crash in the United States. The bank rate of the bank of England rose from 4½ to 7 per cent, where it remained for nearly two months. During this period the market rate averaged from 5½ to 6½ per cent. Imports and exports showed smaller and smaller increases over the preceding year and in the early months of 1908 began to decline; clearings fell off sharply and trade union unemployment increased to nearly 10 per cent during the latter months of 1908.

In the United States where the crisis degenerated into a panic, conditions were much worse. In advance of the actual outbreak of the panic there was for months evidence of a tension in the investment market. Copper especially fell in price and was followed by copper stocks. This precipitated difficulty among a group of banks that were more or less closely identified with the copper interests. Runs were started and a number of banks were forced to suspend payments. A scramble for cash followed, spreading from New York throughout the United States and accompanied by very serious

consequences. Among the worst of the effects were a premium on currency which rose at one time as high as 4 per cent; the necessity of introducing numerous substitutes for cash; a demoralization of the domestic and foreign exchange markets that caused heavy losses both to bankers and to business men while the amount and the prices of securities dealt in on the stock exchanges seriously declined. During November and December currency was at a premium of from $\frac{1}{8}$ to 4 per cent. Call loan rates were erratic, going as high as 125 per cent in the latter part of October and fluctuating between 5 and 25 per cent as late as during the latter half of December. During November there was a decline in the amount of time loans and the quoted rates ranged from 6 to 7 per cent in October, 12 to 16 per cent in November and 8 to 12 per cent in December. Worse still was the stoppage of business by those enterprises that could not pay the high rates and could make no special arrangements to secure lower ones. Business failures in the United States which had been as low as 161 in the last week of 1906 were 300 for the week ending December 19, 1907, and 435 for the week ending January 9, 1908. In the second quarter of 1907 there were 2,471 and for the first quarter of 1908 there were 4,909.

These derangements of business would seem to be of interest primarily to the bankers and brokers or to the large borrowers—to the capitalist class. The counterpart of the picture is to be found in the effect of the crisis upon the man of small means and upon the poor. Inability to borrow may mean considerable inconvenience or even financial ruin for the man of large affairs but it does not usually mean actual suffering. Nevertheless his failure to secure funds and the necessity of selling his securities or commodities at a low price may force him to close his factory, to delay extensions or at least to curtail operations. He receives fewer orders for goods and as a result buys smaller amounts of raw materials and lessens his own output.

This means reductions of wages and discharge of workmen. Some writers have urged that the workingman receives a fixed wage and does not assume industrial risks which are borne by the capitalist or entrepreneur. Such a statement is fallacious. The employee participates in the risks of modern industry and suffers from a business derangement far more severely than his employer. The capitalist secures less profits but with his accumulated savings ordi-

narily endures no real privation while large numbers of the workers with little or no savings face actual hunger or starvation. Demands upon charitable organizations increase, bread lines grow longer and suffering becomes widespread and intense until the crisis and the ensuing depression are over.

This brief enumeration is sufficient to make clear the seriousness of crises and to explain why so many attempts have been made to determine their causes and to devise methods for alleviating or preventing them. Few, if any, efforts at a logical explanation were made prior to the nineteenth century. The dislocations of business that occurred with more or less frequency in the centuries preceding brought with them less serious consequences and their effects were less widespread than has been true during the last one hundred years. The introduction of machinery, the development of a world market, a wage system, the complexity of modern finance and, in general, the close interdependence of all countries and individuals during and since the industrial revolution are the reasons for this.

Explanations of crises may be divided conveniently into two general groups. The first includes those which find that each disturbance is due to some special cause. Modern industry is viewed as in a state of stable equilibrium. This condition is "normal" and tends to continue, but numerous influences, which are for the most part unpredictable, are apt to disturb it and bring about an "abnormal" situation. Crises thus have little or nothing in common except their abnormality. They are pathological phenomena and each has its special, unpredictable cause. When the cause has been removed or when the industrial structure has become adjusted to its presence, disturbances disappear and a state of normality again exists.

If this is the correct explanation it is evident that there is no possible limit to the number of causes of crises. Any change in the relative importance of the almost countless forces that are always operating in our economic life or the appearance of any new influence may completely upset the delicate adjustments of our industrial machinery and precipitate disaster.

Among economists the leading exponent of this theory is Wilhelm Roscher. Another writer, Max Wirth, enumerates as the list of causes that produce crises: "(1) harvest failures; (2) discovery of new deposits of coal, metals—particularly of the precious metals;

(3) inventions; (4) opening or closing of commercial routes and of markets; (5) war and revolutions; and (6) leading to depression of trade, the depreciation of the currency."[1]

An interesting collection of special causes of depressions is to be found in the first annual report of the United States commissioner of labor. These were elicited through inquiries by congressional committees and gathered by agents of the bureau of labor. Expansion of credit, contraction of currency, underconsumption, uneven production and others suggest the view that the causes of depressions persist or recur but still others very distinctly suggest the sporadic. Of the latter group there may be mentioned land grants to corporations, free passes, the repeal of the income tax, the faulty collection of revenue, and the introduction of Bessemer steel.

Two comments on this method of accounting for crises seem appropriate. First, it is to be observed that it overlooks or chooses to ignore a certain regularity in the appearance of crises—a regularity that may be significant and call for explanation. In the second place, such an interpretation is discouraging. If the causes are irregular, prediction of crises becomes difficult, if not entirely out of the question. If they cannot be foreseen, prevention is impossible and we have no recourse but to await their appearance and then merely do our best to alleviate their disastrous consequences.

To others, and in fact to most writers in recent years, there seems to be a distinct uniformity in the intervals between crises and in certain of the accompanying phenomena. This has led to the suggestion that there may perhaps be formulated a law of their periodicity. It is said that crises tend to recur and that prosperity, crisis, and depression succeed each other with such regularity as to warrant the use of the word "cycle."

Explanations of this second sort may be called cycle theories and may be divided into three classes. These classes are by no means mutually exclusive but represent differences of emphasis rather than entirely distinct opinions. First are those which find the explanation in the human mind. The ebb and flow of business is due to psychological causes. Second are the theories that find a regularity of recurrence in the operation of some of the forces of nature which determine the crop yield and thus affect values. Third and last in our classification are the theories that place their em-

[1] Quoted from *Economic Crises* by E. D. Jones, p. 23.

phasis upon the structure of our modern economic life. The description of a business cycle quoted above from the writings of Frederick Engels is an illustration of this type of theory.

We may refer to the first of these three classes of theories as psychological. One of the earliest writers to emphasize the importance of mental action was John Mills who declared (in 1867): "The subject of commercial fluctuations will acquire a new dignity if it be found striking its roots far below the level of its physical particulars, and proving itself cognate with the sciences of the mind." Yves Guyot, Horace White and others have in varying degrees stressed the importance of these psychical factors.

This point of view has been carefully analyzed by Professor Jones, who does not, however, stress it unduly in his discussion. The dominance of the impulse to secure wealth distorts recollection, modifying original impressions, repressing unpleasant experiences and removing the correctives that might otherwise control conduct. The optimistic become leaders and through undue concentration of interest and the consequent effect upon the emotions, errors of practice are promoted. This is the more certain to occur since belief tends to stimulate action and since the beliefs and actions of one individual or group are reflected and copied by others. Mistakes are, however, bound to occur. Erroneous beliefs are spread as well as correct ones. Errors rapidly accumulate, increasing in their intensity and consequent effects. Sympathy, as an influence distinct from intellectual conviction, encourages a rapid spread of optimism. Being unintelligent "it makes for the support of opinions dangerous to the stability of industry. An undue concentration of interest resulting in intense emotion is always prejudicial to sound reasoning."

This excessive optimism leads to engagements and contracts whose fulfillment is beyond the power of their makers. A realization of this appears here and there, producing uncertainty. Actual inability to keep agreements and to make payments when due soon occurs and the uncertainty spreads. Doubt and hesitation extend their influence in the same manner and with the same rapidity as did optimism in the earlier phase of the cycle. Economies become necessary and expenditures are curtailed, thus aggravating the difficulty. Even if an actual panic is avoided, discouragement and depression appear. Pessimism regarding the immediate future is

the dominant attitude of mind and disappears slowly, perhaps not for some months or years.

The second class of cycle theories find the explanation of crises in certain periodical changes in the operation of natural forces. This point of view may be made clear by summarizing the conclusions of two writers. Writing in 1878, W. Stanley Jevons, the well known English economist, referred to the theory of John Mills (which we have already mentioned) by saying: "I can see no reason why the human mind, in its own spontaneous action, should select a period of just 10.44 years to vary in. Surely we must go beyond the mind to its industrial environment." Professor Jevons investigated carefully the crises during the eighteenth and nineteenth centuries and concluded that there had been an exact regularity in their appearance. He also observed that the latest available study of the sun-spot period, that of Mr. J. A. Broun, showed an interval of 10.45 years between them. This close correspondence led to the suggestion of a connection between the two phenomena and the famous "sun-spot and harvest" theory was the result. Elaborate investigations led to the conviction that a greater number of sun-spots at any given time is an evidence of greater solar activity and consequently a greater radiation of heat, the effect of which will be felt upon the earth. When the spots are fewer in number, less heat is radiated and the weather will be cold, cloudy and damp, resulting in poor crops and high prices. Alternation of these conditions produces regular fluctuations in commercial activities.

A perusal of the essays of Professor Jevons indicates the wide extent of his research but a question quickly arises when one encounters his statement: "I am free to confess that in this search I have been thoroughly biased in favor of a theory, and that the evidence which I have so far found would have no weight, if standing by itself." Aside from this, it may be pointed out that there are several difficulties with it, at least as stated by its author. Students of crises by no means agree that there is always an interval of 10.44 years between crises and there is much difference of opinion among scientists regarding sun-spots and their influence on climates and crops. On this President A. T. Hadley has written: "The Civil War in the United States quite broke up the regular ten-year round of crises, and, as it did not have any appreciable effect on

the sun-spots, it may be said to have broken up the theory also."

The second of the writers in this class whose views we shall summarize is Professor Henry L. Moore whose volume entitled *Economic Cycles: Their Law and Cause* has recently appeared. To Professor Moore the fundamental problem of economic dynamics is to formulate the law governing the "ebb and flow of economic life" which is "the most general and characteristic phenomenon of a changing society." The motto of the department of agriculture of the United States—"Agriculture is the foundation of manufacture and commerce"—is significant and that the farmer is at the mercy of the weather is proverbial. There may be such a close connection between the weather, the crops and crises that we shall be able to find in weather changes the cause of crises.

An examination of all the numerous factors involved in the problem would be a stupendous task and Professor Moore limits himself to a consideration of a selected few. "The variation in the quantity of the rainfall is one of the weather changes known to have a marked effect upon the yield of the crops." Hence the inquiry is directed to an examination of the "appropriate data with reference to three things: (1) the periodicity of rainfall; (2) the effect of rainfall on the crops; (3) the relation of the yield of the crops to economic cycles." The study is a statistical one conducted with the greatest of care to avoid error and the conclusions are deserving of the most careful consideration. All generalizations are made carefully and used cautiously with a full realization that a limited area—the upper Mississippi Valley—has been used and a period of only seventy-two years surveyed. Of the numerous climatic factors only rainfall has been examined.

Remembering that these limitations are fully realized we may state the conclusions in Professor Moore's own words: "The fundamental, persistent cause of the cycles in the yield of the crops is the cyclical movement in the weather conditions represented by the rhythmically changing amount of rainfall; the cyclical movement in the yield of the crops is the fundamental, persistent cause of economic cycles." This should be supplemented with a statement of the law that has been sought and which may be formulated thus:

The weather conditions represented by the rainfall in the central part of the United States, and probably in other continental areas, pass through cycles of

approximately thirty-three years and eight years in duration, causing like cycles in the yield per acre of the crops; these cycles of crops constitute the natural, material current which drags upon its surface the lagging, rhythmically changing values and prices with which the economist is more immediately concerned.

Without discussing any other theories of this second class we may now turn our attention to the third. In this the writers are numerous and we shall be compelled to limit ourselves to a few and consider them typical. Their theories are characterized by an emphasis on the interdependence of modern economic life and the complexity of business organization. The significance of human psychology is not denied but acknowledged more or less specifically. Under modern conditions, however, these mental traits have a broad opportunity to exercise their influence and the disaster that results is widespread. Each individual is dependent upon others and in a similar manner the welfare of each community and each nation is dependent upon that of every other. Difficulties arising from any cause spread rapidly in all directions. The specific occurrence that precipitates the disaster may be different in each case but the underlying cause is the unstable equilibrium of our economic life.

Since we must limit ourselves to a discussion of only a few of these theories we shall choose four, representing somewhat widely separated groups: John Stuart Mill, chosen because of his position of leadership among the classical economists; the socialist theory as a radical protest against classicism; the views of George H. Hull, who writes as a business man; and the explanations presented by a modern economist, Professor Wesley C. Mitchell, whose comprehensive study entitled *Business Cycles* is one of the latest important contributions to our knowledge of the topic.

Malthus, Chalmers and Sismondi had contended that crises were due to a general oversupply or glut of goods. To this Mill objected, alleging that such a condition is impossible. When it is said that supply may outrun demand either one of two elements may be in the mind of the speaker—the desire to possess or the means of purchase. The latter supposition is necessarily incorrect.

Each person's means of paying for the productions of other people consists of those which he himself possesses. All sellers are inevitably, and by the meaning of the word, buyers. Could we suddenly double the productive powers of

the country, we should double the supply of commodities in every market; but we should, by the same stroke, double the purchasing power.

There is thus always present the means of purchase but it may be that those who have the means of purchase do not desire to secure other goods or perhaps desire to secure goods of a kind not available. Or it may be that those who have a very intense desire to purchase do not possess any goods at all. "Those who have the means, may not have the wants, and those who have the wants may be without the means." In the aggregate there has not been an over-production of goods but merely a misdirected or ill assorted production.

General over-production of goods is thus impossible. There may be, however, an under-supply of money. In times of crisis, the annihilation of credit may cause everybody to desire money, hesitate to part with it or be willing to procure it at almost any sacrifice. The remedy is not a curtailment of production and a consequent diminution in the supply of goods but a restoration of confidence. There may be a partial glut of goods but no general over-supply. These partial gluts may temporarily become general because of a collapse of credit. Fearing an inability to meet their engagements, merchants and traders curtail their accommodations to others. The crisis is due to the contraction of credit which may have been precipitated by excessive speculation, by the withdrawal of capital from one market for investment in another, or by some other influence.

Marxian socialism has found in the crisis the most acute evidence of the inherent contradictions in our capitalistic order. Everywhere in our industrial life there are antagonisms. All history is a struggle between opposing classes, master contending against slave, patrician against plebeian, capitalist against laborer. There is a contradiction between socialized production and individual appropriation, between socialized production in the workshop and anarchistic production in society generally.

Reverting to the views of Mill's predecessors, Marx and Engels find that over-production is the cause of crises. Thus in the *Communist Manifesto* we find: "In these crises there breaks out an epidemic that in all earlier epochs would have seemed an absurdity —the epidemic of over-production." Also in the description of a crisis by Engels, as we have given it above, are the words, "The mass of the workers are in want of the means of subsistence, because they

have produced too much of the means of subsistence,"—another contradiction in our social order.

In the production of commodities the workers work socially for social objects. They coöperate with each other and with the capitalist to produce for social consumption. This product should be a social product but is appropriated by an individual, the capitalist employer, for his own advantage—the realization of his profits. The value of these goods is the amount of labor time socially necessary for their production but the capitalist is able through his advantageous position to secure the services of labor for much less and to appropriate the difference. Labor has the power and the sole power to create value but receives in return much less than it creates.

The demand for goods, however, is the purchasing power of the laborers or producers. Since there is given to them continually an amount less than they produce there is bound to be an ever increasing difference between the goods produced and the purchasing power of labor, or the demand for goods. This is increased by the fact that production is not socially directed. Each capitalist in the competitive régime seeks his own profit and produces largely without reference to the plans of others. Production in general is thus undirected, anarchistic. Commodities rapidly accumulate in excess of any possible demand for them. Production must then be curtailed with resulting loss to capital and unemployment and distress to labor. As a result "the times of greatest distress for the mass of the people now are the times when there is a complete glut of the commodities which they need and which they make."

George H. Hull is an American business man who has become interested in crises through his daily experience with industrial problems and who has published his conclusions in a volume entitled *Industrial Depressions*. Mr. Hull takes the view that crises, or rather depressions, are an old problem but that the modern industrial depression is a new malady. Some modern depressions are due to causes that have been generally recognized such as "war, pestilence, famine, bad legislation, political upheavals, and other great calamities," but in recent years a situation has developed which has not hitherto been correctly diagnosed and understood. This particular class of depressions, and not all classes, are then analyzed.

The demand for certain classes of goods is incapable of much fluctuation because they are necessities. Fluctuations do occur in agriculture, commerce and finance but within quite narrow limits. Also construction work is quite constantly demanded to an amount necessary for maintenance, replacements and such extensions as are made necessary by the growth of population. There is, however, a certain amount of construction that may be called "extra" or "optional" or "investment construction." Investment construction is undertaken only when the investor sees in it the prospect of liberal profit. In a time of low prices far-seeing investors enter into contracts for a large amount of construction work. Their lead is followed by others and the resulting demand for construction materials creates a boom in the industries immediately affected. Of these, iron and steel are the most important.

In a short time contractors discover that they are obligated in excess of their capacity. Labor and materials cannot be secured on terms that make possible the fulfillment of agreements on contract time and as rapidly as this is realized wages and prices rise. Again the far-seeing ones take the lead, this time by ceasing to enter into fresh agreements. Plans for extension are deferred and those lines of business that furnish construction materials such as iron, steel, cement and lumber, face a falling off in the demand for their products. Laborers on construction enterprises also face shorter hours, reduction in wages or dismissal. A large volume of contracts brought on the period of prosperity and now the reduction in their volume brings depression. Prices and wages fall until the possibility of large profits is again tempting and a new cycle is started. We may quote Mr. Hull as follows for a brief summary of his view:

> We recognize the due influence of everything which tends to increase or decrease the volume of the industries. We claim, however, that after a country has become chiefly manufacturing, no combination of favorable influences has been strong enough to develop a boom, except on low prices of construction, and that after abnormally high prices develop, no combination of favorable influences has been strong enough to keep the boom going beyond the time necessary to complete the volume of extra construction made up of old, low-priced contracts.

The remedy needed is described thus:

> The remedy we suggest is the inauguration by the national government of a system for collecting and publishing monthly all pertinent information in relation to the existing volume of construction under contract for future months, and all

pertinent information in relation to the capacity of the country to produce construction materials to meet the total demand thus indicated.

We may now turn to the fourth illustration of this particular class of theories. Professor Wesley C. Mitchell's work called *Business Cycles* is the most voluminous and painstaking analysis that has appeared for some time. Professor Mitchell finds that crises have no regular period of recurrence, that business cycles do not always pass without interruption through the same round of prosperity, crisis and depression, that there are many variations in intensity and that no two periods show exactly the same combinations of elements. There are diversities due to influences arising from other than business sources, among which are the weather, earthquakes, war, epidemics and tariff changes.

A correct explanation of the persistent, recurring causes, however, must rest upon a recognition of the fact that "the industrial process of making and the commercial process of distributing goods are thoroughly subordinated to the business process of making money." Business activity passes through cycles. Starting with the period of depression we find a relatively low level of prices, reductions in business costs, narrow margins of profits, moderate stocks of goods, cautious buying and business conservatism. Accumulated stocks of goods, however, are finally exhausted. Demand gradually revives encouraged by the continued growth of population, new tastes among consumers and new methods among producers. Most important of all there is a revival in the investment demand for industrial equipment. Low rates of interest encourage borrowing, contracts may be let to advantage and capitalists become less timid as memories of the crisis grow less distinct.

Expansion in certain active trades or in a certain section or sections creates a demand for materials that must be purchased "from other enterprises, the latter from others, and so on without assignable limits." Family incomes expand, consumers' demands increase and "soon or late this expansion of orders reaches back to the enterprises from which the impetus to greater activity was first received, and then this whole complicated series of reactions begins afresh at a higher pitch of intensity." Optimism spreads and the expansion is still further encouraged.

Those enterprises whose order books are well filled stand out for higher prices on new orders, even in highly competitive lines,

since beyond a certain point more business can be handled only after heavy investments in new equipment. Some prices however rise more rapidly than others, retail prices lagging behind wholesale, consumers' goods behind producers' goods, etc. Wages rise less than wholesale prices and stocks more rapidly than commodities. The growing physical volume of sales combined with these variations in price fluctuation result in larger profits and in the presence of growing business optimism there is a marked expansion of investments. Prosperity becomes intense.

But this prosperity breeds a crisis. Business costs increase because of the heavy expense of adding to equipment or of bringing antiquated properties back into use. Wage payments increase in standard rate and because of the higher cost of overtime. Overtime brings weariness and labor efficiency declines. Numerous small wastes are multiplied in the hurry to bill orders. There is also an increasing tension in the investment and money markets which adds to costs and lowers profits because of the higher interest rate and because many enterprises must be abandoned.

To offset these encroachments of costs upon profits, selling prices must, if possible, be raised still further. In certain lines of business, however, this cannot easily be done. Demand for new goods, especially at higher prices, cannot be stimulated sufficiently to prevent a loss. Sharp contrasts thus develop. A growing number of enterprises face declining profits. Worse than the necessity of passing dividends is the appearance of doubt concerning outstanding credits. Business credit is based primarily upon the capitalized value of present and prospective profits. Cautious creditors refuse renewals and press for settlement of accounts.

Desire to secure profits soon becomes subordinated to the necessity of maintaining solvency. Financial resources are conserved. Outstanding liabilities are provided for and efforts to push sales are checked. The volume of orders lessens, expansion gives way to contraction, and discount rates rise. The crisis is on and may or may not degenerate into a panic. A period of depression follows and another business cycle is soon under way.

This paper aims merely to present a few of the leading theories of crises, those reviewed being the ones that appear to the writer most typical and most valid. In recent years many new explanations have been offered but a review of more of them is impracticable.

The reader who is interested will find a valuable summary of the most recent in Mitchell's *Business Cycles*. In conclusion we may merely observe that many theories are obviously presented to defend some of the other views of their advocates. The connection of the socialist theory with the socialistic idea of value is an obvious one. It may also be true that interest in some particular phase of study may cause the investigator to overlook the importance of other elements in the problem. Thus to Professor Moore climatic conditions seem of great importance, while Professor Mitchell relegates them to a very minor position. As time passes it will doubtless be possible to estimate the significance of each factor with more accuracy. When this is done a more satisfactory theory can be formulated and methods of prevention and alleviation employed to better advantage.